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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,851	02/06/2001	Yukie Miyamoto	NE-1038-US/KM	6853

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EXAMINER	
BLOUNT, STEVEN	

ART UNIT	PAPER NUMBER
2661	5

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/776,851	MIYAMOTO, YUKIE	
	Examiner	Art Unit	
	Steven Blount	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3,4*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15, lines 6 – 7, "regardless of a nominal lower limit of a power control range" is indefinite.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 – 3, 15, 17, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,794,129 to Komatsu.

With regard to claim 1, Komatsu teaches that if the quality of the signals is "low or unnecessarily high", the transceiver sends to the base station a request for a change in power, containing information on how much the power is to be "increased or decreased" (col 1, lines 53+). While it is not *explicitly* stated that you increase the power if the quality has higher than a threshold, one of ordinary skill in the art would recognize by the above statement that this is what is implied, and would find it obvious in view of

what is stated. The examiner notes that in addition to the fact that nominal limit values are stated in the preamble, but not in the body of the claim, "provisional values for transmission power control signals" are mentioned in col 5, lines 31+.

With regard to claim 2, see col 1 lines 53+ and note the same reasoning as above.

With regard to claim 3, note the above, in addition to the fact that in col 4 lines 43 – 50 and col 5 lines 47 – 51, it is stated that the sum of the channel powers is determined, and if it surpasses a value, the channels with relatively high values are reduced (col 5 line 56). This would make obvious the opposite – that if the calculation is made and does not surpass a predetermined value, then there is available power to be shared on the channel with the base station requesting the increase in transmit power.

With regard to claims 15 and 17, see the rejections above where the claim limitations are discussed.

With regard to claim 28, see the rejection of claim 1 above, including the mention of provisional values for transmission power control signals.

5. Claims 4 – 7, 14, 16, and 18 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,794,129 to Komatsu as applied above, and further in view of U.S. patent 6,341,214 to Uesugi.

Komatsu teaches the invention as described above, including setting the power values to upper or lower limits depending upon a power value calculation (col 5 lines 40 – 46). Komatsu does not, however, teach "decreasing said transmit power of said

downlink channel if said downlink channel has a quality lower than a specified threshold value." This is taught in Uesugi. See col 2 lines 53+ and col 6 lines 50+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have lowered the transmit power of the downlink channel of Komatsu when the quality is lower than a specified threshold value, in light of the teachings of Uesugi, in order to save battery power.

With regard to claims 5 – 7, see the rejection of claim 1 above.

With regard to claim 14, see the rejections above, including the citation to col 5 lines 40 – 46.

With regard to claims 16, and 18 – 21, see the rejections above.

6. Claims 8 – 11 and 22 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,794,129 to Komatsu and U.S. patent 6,341,214 to Uesugi as applied above, and further in view of U.S. patent 6,226,526 to Sakoda et al. With regard to claim 8, Komatsu/Uesugi teach the invention as described above, but do not teach decrementing or incrementing the power by a stepsize that varies depending on the length of time the power level is lower than a predetermined level. Sakoda et al teaches Incrementing a count value in proportion to the number of power up or power down commands are made: "Accordingly, when the number of times the power-down command is supplied increases and the count value of the counter 36 reaches "M" in due course, the control unit 34 lowers the transmission power by one dB according to the power-down command" (col 8 lines 44+. See also col 7 lines 44+). Since it is stated that "Incidentally, since the maximum count value of the counter 36 is set to "N" (in this

example, N=10), the count value is not incremented over "N" even if the number of power-up commands exceeds "N"." (col 7 lines 58+). In view of the fact that the number of counts needed to reach a maximum value is proportional to the passage of time (as in applicants specification, page 11, lines 11+), It would have been obvious to one of ordinary skill in the art at the time of the invention to have decremented the power in Komatsu/Useugi by a stepsize that corresponds to the length of time the power level is lower than a predetermined level in light of the teachings of Sakoda et al in order to help optimize the channel conditions.

With regard to claims 22 – 25, see the above, and again note the maximum value "N" cited above.

7. Claims 12, 13, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,794,129 to Komatsu as applied above, and further in view of U.S. patent 6,226,526 to Sakoda.

With respect to claim 12, Komatsu teaches the invention as described above, but does not teach the use of a count value to control power level. This is taught in Sakoda as discussed above, wherein it would have been obvious to supply Komatsu with a count value to control the power level in light of the teachings of Sakoda in order to further optimize the channel conditions.

With regard to claim 13, see the rejections above, including col 5 lines 40 – 45 of Komatsu.

With regard to claims 26 – 27, see the rejections above, including col 5 lines 40 – 45 of Komatsu and also the value limit value "N" in Sakoda discussed above.

8. Examiner Steven Blount may be reached at 703-305-0319 between the hours of 9:00 and 5:30 Monday through Friday.

Ajit Patel
Primary Examiner

SB

5/27/04